

**=> IFW: Scan as Doc Code: SRNT <=
 Doc Date:**

TC 3700 Inventor Search Program

See attached inventor searches for applications and/or patents to help resolve questions of overlapping subject matter. These searches are provided as an initial examination aid: examiners should perform updated or expanded PALM or EAST inventors searches as appropriate.

Serial Number: 10537302

**1.) See attached printout of inventors listed in
PALM**

**2.) See attached EAST Inventor Search
Printout shows Inventor search terms**

Day : Monday
Date: 8/14/2006
Time: 17:09:13

**PALM INTRANET**

Inventor Information for 10/537302

Inventor Name	City	State/Country
SUZUKI, NORIYUKI	WAKAYAMA-SHI	JAPAN

[Appln Info](#)[Contents](#)[Petition Info](#)[Atty/Agent Info](#)[Continuity/Reexam](#)[Foreign Data](#)[Invento](#)**Search Another: Application#****or Patent#****PCT / /****or PG PUBS #****Attorney Docket #****Bar Code #**

To go back use Back button on your browser toolbar.

Back to [PALM](#) | [ASSIGNMENT](#) | [OASIS](#) | [Home page](#)

US 20060173100 A1	20060803	Fluororesin composite compositions	523/216	524/445; 524/449; 524/544	Lee; Jeong Chang et al.
US 20060066897 A1	20060330	Imaging and recording system	358/1.15		Takada; Tomoyuki et al.
US 20060058424 A1	20060316	Polyamide resin composition and process for producing the same	523/200		Suzuki; Noriyuki et al.
US 20060025881 A1	20060202	Simulation method and apparatus for simulating image of twisted yarn	700/139		Suzuki; Noriyuki
US 20050277737 A1	20051215	Thermoplastic resin composition for automobile parts	525/178		Yamauchi, Shigeru et al.
US 20050229383 A1	20051020	Insulator and manufacturing method thereof, and stator for electric rotating machine	29/596	264/328.1; 29/527.3	Yamamura, Masashi et al.
US 20050216801 A1	20050929	Latch and phase synchronization circuit using same	714/724		Suzuki, Noriyuki
US 20050216761 A1	20050929	Information processing apparatus, control method thereof, control program, and storage medium	726/22		Takada, Tomoyuki et al.
US 20050212963 A1	20050929	External synchronous signal generating circuit and phase difference measuring circuit	348/537		Suzuki, Noriyuki
US 20050206803 A1	20050922	LIQUID CRYSTAL DISPLAY DEVICE	349/61		Suzuki, Noriyuki
US 20050206594 A1	20050922	LIQUID CRYSTAL DISPLAY DEVICE	345/87		Suzuki, Noriyuki
US 20050153191 A1	20050714	Fuel cell	429/34	429/38	Suzuki, Noriyuki et al.
US	20050630	Electric steering lock	70/186		Suzuki,

20050138977 A1		device			Noriyuki et al.
US 20050079656 A1	20050414	Method of manufacturing a semiconductor device	438/149	257/E21.133; 257/E21.318; 257/E21.319	Ichijo, Mitsuhiro et al.
US 20050039495 A1	20050224	KNIT DESIGN METHOD AND DEVICE	66/232		Suzuki, Noriyuki
US 20050020037 A1	20050127	Semiconductor film, semiconductor device and method of their production	438/485	257/E21.101; 257/E21.133; 257/E21.134; 257/E21.318; 257/E21.413; 257/E29.278; 257/E29.283	Asami, Taketomi et al.
US 20040255149 A1	20041216	Information processing system, information processing apparatus, method of controlling the information processing apparatus, disk array device, method of controlling the disk array device, method of controlling display of the disk array device, and control programs for implementing the methods	726/17		Toyama, Takeshi et al.
US 20040237692 A1	20041202	Shift device	74/473.12		Syamoto, Noriyasu et al.
US 20040224486 A1	20041111	Semiconductor film, semiconductor device, and manufacturing method thereof	438/482	257/E21.101; 257/E21.133; 257/E21.134; 257/E21.413; 257/E21.703	Ichijo, Mitsuhiro et al.
US 20040222715 A1	20041111	Insulator and manufacturing method thereof, and stator for electric	310/218	310/259	Yamamura, Masashi et al.

		rotating machine			
US 20040197561 A1	20041007	Process for producing surface-treated inorganic particle and surface-treated inorganic particle	428/407		Suzuki, Noriyuki et al.
US 20040191660 A1	20040930	Electrophotographic printing method, monoazo iron complex compound, charge controlling agent using the same and toner using the charge controlling agent	430/108.23	430/109.3; 534/710	Otsuka, Hideyuki et al.
US 20040182121 A1	20040923	Antitheft device for vehicle	70/186		Fukatsu, Tomohiro et al.
US 20040165314 A1	20040826	Portable storage device, method of controlling the same, control program for executing the method, and electronic information apparatus	360/133	361/685	Fujiwara, Masato et al.
US 20040160530 A1	20040819	Method and apparatus for canceling jitter	348/536	348/194	Suzuki, Noriyuki
US 20040148983 A1	20040805	Electrically-driven steering lock device	70/186		Suzuki, Noriyuki et al.
US 20040139610 A1	20040722	Method for manufacturing aluminum alloy wheel	29/894.3	29/894.35	Suzuki, Noriyuki et al.
US 20040117576 A1	20040617	Storage unit, information processing apparatus, and access control method	711/163	711/115	Kobayashi, Makoto et al.
US 20040104755	20040603	SDI signal discriminating	327/300	375/373	Suzuki, Noriyuki

A1		apparatus			
US 20040035237 A1	20040226	Shifting device	74/473.12		Matsui, Kazuhito et al.
US 20040024965 A1	20040205	Storage unit, information processing apparatus, and eject control method for storage unit	711/115	711/112	Suzuki, Noriyuki et al.
US 20040024139 A1	20040205	Polyester resin composition and process for the preparation thereof	525/418		Suzuki, Noriyuki et al.
US 20030162111 A1	20030828	Charge controlling agent, method for producing the same and toner for developing electrostatic image	430/108.4	562/473	Otani, Shinji et al.
US 20030142163 A1	20030731	Ink jet recording apparatus and control method therefor	347/19		Nakayama, Toru et al.
US 20030131056 A1	20030710	Method and system of distributing teaching data for image processing apparatus	709/204		Suzuki, Noriyuki et al.
US 20030128774 A1	20030710	Receiver apparatus	375/316	375/334	Suzuki, Noriyoshi et al.
US 20030082859 A1	20030501	Method of manufacturing a semiconductor device	438/166	257/E21.133; 257/E21.318; 257/E21.319	Ichijo, Mitsuhiro et al.
US 20030082503 A1	20030501	Apparatus and method for setting teaching data, teaching data providing system over network	434/118	382/141; 434/322	Suzuki, Noriyuki et al.
US 20030043927 A1	20030306	Multicarrier demodulating method and apparatus, and	375/260		Suzuki, Noriyoshi

		multicarrier modulating metho and apparatus			
US 20030025766 A1	20030206	Ink-jet printing head and ink-jet printing apparatus	347/65		Tanaka, Sohei et al.
US 20030004257 A1	20030102	Conductive melt- processable fluoropolymer	524/495		Kondo, Shosaku et al.
US 20020190757 A1	20021219	Output control circuit and output control method	326/105		Tanaka, Souhei et al.
US 20020182828 A1	20021205	Semiconductor film, semiconductor device and method of their production	438/485	257/E21.101; 257/E21.133; 257/E21.134; 257/E21.318; 257/E21.413; 257/E29.278; 257/E29.283	Asami, Taketomi et al.
US 20020163562 A1	20021107	INK-JET PRINTING HEAD AND INK-JET PRINTING APPARATUS	347/65		TANAKA, SOHEI et al.
US 20020140979 A1	20021003	RECORD CONTROL APPARATUS AND RECORDING APPARATUS	358/1.17		TANAKA, SOUHEI et al.
US 20020118408 A1	20020829	Printing apparatus and method	358/514		Nakayama, Toru et al.
US 20020118238 A1	20020829	Printing apparatus and printing system	347/9		Suzuki, Noriyuki et al.
US 20020111004 A1	20020815	Semiconductor device having a fuse and a fabrication process thereof	438/601	257/209; 257/530; 257/E21.592; 257/E21.645; 257/E21.646; 257/E21.648; 257/E21.66; 257/E23.149; 438/132; 438/281	Suzuki, Seiichi et al.
US	20020606	Method of and	375/219		Suzuki,

20020067763 A1		apparatus for data transmission computer product			Noriyasu et al.
US 20020047472 A1	20020425	Brush holding device capable of reducing noise	310/239		Yamada, Takahiro et al.
US 20020004158 A1	20020110	Separators for solid polymer fuel cells and method for producing same, and solid polymer fuel cells	429/34	264/319; 429/32	Suzuki, Noriyuki et al.
US 20010040217 A1	20011115	Connection inspecting apparatus, connection inspecting method, and recording medium for recording programs executing the method	250/358.1	378/58; 382/145	Mizuoka, Seiji et al.
US 20010023418 A1	20010920	Method and apparatus for estimating product cost	705/400	700/96; 700/97	Suzuki, Noriyasu et al.
US 20010021219 A1	20010913	xDSL transceiver	375/222	375/232; 375/350	Sasaki, Takashi et al.
US 20010011942 A1	20010809	VEHICLE ELECTRONIC KEY SYSTEM	340/5.65	307/10.5; 340/5.2; 340/5.31	YAMAMOTO, KEIJI et al.
US 7086306 B2	20060808	Shift device	74/473.33	74/471XY; 74/473.12; 74/473.18	Syamoto; Noriyasu et al.
US 7056963 B2	20060606	Polyester resin composition and process for the preparation thereof	523/209	523/205; 523/216; 524/377; 524/445; 524/447; 524/449	Suzuki; Noriyuki et al.
US 7055351 B2	20060606	Electrically-driven steering lock device	70/186	70/252	Suzuki; Noriyuki et al.
US 7035348 B2	20060425	Receiver apparatus	375/316	375/347; 375/349; 455/132	Suzuki; Noriyoshi et al.
US 7021093	20060404	Antitheft device for	70/186		Fukatsu;

B2		vehicle			Tomohiro et al.
US 6946769 B2	20050920	Insulator and manufacturing method thereof, and stator for electric rotating machine	310/218	310/216; 310/254	Yamamura; Masashi et al.
US 6897976 B2	20050524	Record control apparatus and recording apparatus	358/1.17	358/1.8	Tanaka; Souhei et al.
US 6897000 B2	20050524	Charge controlling agent, method for producing the same and toner for developing electrostatic image	430/108.4	430/120; 562/475; 562/476; 562/477	Otani; Shinji et al.
US 6880367 B2	20050419	Knit design method and device	66/232	700/141	Suzuki; Noriyuki
US 6872949 B2	20050329	Connection inspecting apparatus, connection inspecting method, and recording medium for recording programs executing the method	250/358.1	250/361R; 324/501; 378/54; 378/56	Mizuoka; Seiji et al.
US 6845125 B2	20050118	xDSL transceiver	375/219	370/286; 375/229; 375/232; 375/233; 375/350	Sasaki; Takashi et al.
US 6821828 B2	20041123	Method of manufacturing a semiconductor device	438/166	257/E21.133; 257/E21.318; 257/E21.319; 438/149; 438/152; 438/162	Ichijo; Mitsuhiro et al.
US 6789865 B2	20040914	Printing apparatus and printing system	347/9	347/14; 347/19; 347/5	Suzuki; Noriyuki et al.
US 6743700 B2	20040601	Semiconductor film, semiconductor device and method of their production	438/476	257/E21.101; 257/E21.133; 257/E21.134; 257/E21.318; 257/E21.413; 257/E29.278;	Asami; Taketomi et al.

				257/E29.283	
US 6709781 B2	20040323	Separators for solid polymer fuel cells and method for producing same, and solid polymer fuel cells	429/34	429/35; 429/36; 429/38; 429/39	Suzuki; Noriyuki et al.
US 6700402 B2	20040302	Output control circuit and output control method	326/37	326/101; 326/105	Tanaka; Souhei et al.
US 6669335 B2	20031230	Ink-jet printing head and ink-jet printing apparatus	347/65		Tanaka; Sohei et al.
US 6664700 B2	20031216	Brush holding device capable of reducing noise	310/239	310/249; 310/71	Yamada; Takahiro et al.
US 6583208 B1	20030624	Polyester resin compositions and processes for the preparation thereof	524/445		Suzuki; Noriyuki
US 6582628 B2	20030624	Conductive melt-processible fluoropolymer	252/511	252/500; 252/502; 264/103; 264/104; 264/127; 524/495; 524/496	Kondo; Shosaku et al.
US 6557984 B2	20030506	Ink-jet printing head and ink-jet printing apparatus	347/65	347/21	Tanaka; Sohei et al.
US 6443221 B1	20020903	Continuous casting apparatus for molten metal	164/502	164/443	Suzuki; Noriyuki et al.
US 6400254 B2	20020604	Vehicle electronic key system	340/5.6	307/10.3; 307/10.5; 340/5.61; 340/5.64; 340/5.65; 340/5.67; 340/542; 340/825.72	Yamamoto; Keiji et al.
US 6399472 B1	20020604	Semiconductor device having a fuse and a fabrication method thereof	438/601	257/E21.648; 257/E21.66; 257/E23.149; 438/132; 438/215;	Suzuki; Seiichi et al.

				438/281; 438/467	
US 6393932 B1	20020528	Shift lever device	74/473.12	74/335	Seki; Yoshiyuki et al.
US 6346873 B1	20020212	Power saving in a contention and polling system communication system	340/3.41	370/311; 455/343.1	Suzuki; Noriyuki et al.
US 6316508 B1	20011113	Rubber composition and method for producing the same	521/41	241/23; 241/260.1; 241/60; 241/65; 525/236; 525/237	Matsushita; Mitsumasa et al.
US 6311237 B1	20011030	System including single host buffer for transmit and receive data and reception buffer in interface device having stand-by area for use by host buffer when abnormal state is detected	710/52	710/15; 710/19; 710/33; 710/55; 710/56; 711/147; 711/170	Suzuki; Noriyuki et al.
US 6295848 B1	20011002	Steering lock system	70/186	70/252; 74/89.14; 74/89.17	Suzuki; Noriyuki
US 6239195 B1	20010529	Thermoplastic resin composition containing silan-treated foliated phyllosilicate and method for producing the same	523/204	524/265; 524/267; 524/269	Suzuki; Noriyuki et al.
US 6233986 B1	20010522	Steering lock apparatus	70/186	464/57; 70/252	Suzuki; Noriyuki et al.
US 6207723 B1	20010327	Rubber composition and method for producing the same	521/41	241/23; 241/260.1; 241/60; 241/65; 525/236; 525/237	Matsushita; Mitsumasa et al.
US 6163875 A	20001219	Semiconductor testing equipment	716/4	714/724	Suzuki; Noriyuki

US 6125671 A	20001003	Steering lock system	70/186	70/252	Suzuki; Noriyuki
US 6115426 A	20000905	Adaptive communication apparatus	375/260	370/319; 370/343; 370/344; 375/267; 375/349; 455/273	Fujimoto; Mitoshi et al.
US 6087878 A	20000711	Signal output circuit, parallel interface circuit and printer apparatus	327/319	327/321; 327/387	Suzuki; Noriyuki et al.
US 6027198 A	20000222	Recording head and recording apparatus division block driving	347/12	347/57	Tanaka; Sohei et al.
US 6027197 A	20000222	Recording apparatus for effecting multi-pass printing	347/9	347/41	Kaburagi; Yoshiaki et al.
US 6014132 A	20000111	Electronic device	345/173	345/211	Shimada; Kazutoshi et al.
US 5995663 A	19991130	Shape detection apparatus	382/203	382/291	Itsuzaki; Yoshihiro et al.
US 5936619 A	19990810	Information processor	345/205	345/214; 361/681; 708/141	Nagasaki; Katsuhiko et al.
US 5926650 A	19990720	Method and system utilizing a negotiation phase to transfer commands and data in separate modes over a host/peripheral interface	710/14	710/20; 710/3; 710/4; 710/5; 710/8	Suzuki; Noriyuki et al.
US 5921127 A	19990713	Hot strip rolling mill	72/201		Ogawa; Shigeru et al.
US 5794469 A	19980818	Steering lock device	70/252	70/186; 70/247	Suzuki; Noriyuki
US 5764817 A	19980609	Image processing apparatus for effecting a series of processes	382/302	382/101	Suzuki; Noriyuki et al.
US 5726686 A	19980310	Coordinates input apparatus	345/179		Taniishi; Shinnosuke et al.
US 5657459	19970812	Data input pen-based	361/681	345/169	Yanagisawa;

A		information processing apparatus			Ryozo et al.
US 5644653 A	19970701	Information processing apparatus and control method thereof having user character recognition	382/187	708/141	Sunakawa; Shinichi et al.
US 5604559 A	19970218	Photosensitive material processing apparatus	396/578	396/570; 396/626	Yamanouchi; Kenji et al.
US 5598150 A	19970128	Polling communication system	340/3.43	340/3.51; 340/825.52	Suzuki; Noriyuki et al.
US 5570298 A	19961029	Dot pattern-examining apparatus	382/170	382/174; 382/199	Suzuki; Noriyuki et al.
US 5561447 A	19961001	Coordinate input apparatus	345/179	178/19.04; 178/20.03	Suzuki; Noriyuki et al.
US 5541508 A	19960730	Position detector for synchronizing operation of a recording device with that of a carriage in a recording apparatus	324/207.21	347/37; 702/150	Suzuki; Noriyuki
US 5526161 A	19960611	Communication control method and apparatus	398/118	398/122; 398/127	Suzuki; Noriyuki et al.
US 5517608 A	19960514	Communication apparatus and method	398/23	398/156; 398/162; 398/197; 398/33	Suzuki; Noriyuki et al.
US 5508777 A	19960416	Photosensitive material processing apparatus in use with a solid processing agent	396/626	430/450	Isokawa; Wataru et al.
US 5477490 A	19951219	Memory control device	365/194	365/189.12; 365/219; 365/239; 365/240	Miyawaki; Hiroto et al.
US 5471226 A	19951128	Coordinate input apparatus and calibration method for the same	345/173	178/18.02; 345/178	Suzuki; Noriyuki et al.
US 5455042 A	19951003	Ointment comprising a	424/443	424/445; 424/447;	Sakai; Yasuyuki et al.

		homogenous mixture of a polymer or copolymer of N-vinylacetamide, water and/or alcohols, and a pharmacologically active component		424/78.31; 424/78.35; 424/78.37	
US D362458 S	19950919	Image forming apparatus	D18/43	D18/40	Suzuki; Noriyuki et al.
US 5427461 A	19950627	Serial printer with carriage position control	400/279	347/37; 400/322	Hirai; Yuichi et al.
US 5420699 A	19950530	Processing apparatus for processing information on photographic film	358/487	355/28; 355/29; 355/72	Yamanouchi; Kenji et al.
US 5417593 A	19950523	Branch connector for connections of a cord to a male connector and a female connector	439/651	439/607; 439/638	Suzuki; Noriyasu et al.
US 5410613 A	19950425	Pattern recognizing apparatus	382/159	382/170; 382/203	Suzuki; Noriyuki
US D356814 S	19950328	Toner bottle for copying machine	D18/43		Suzuki; Noriyuki et al.
US D354305 S	19950110	Copying machine	D18/39	D18/36	Suzuki; Noriyuki
US 5355273 A	19941011	Auxiliary power unit for use with a motor vehicle	361/93.8	361/105; D13/110	Yoshizawa; Nobuyuki et al.
US D350972 S	19940927	Copying machine	D18/36	D18/39	Komada; Takeshi et al.
US 5344655 A	19940906	External application base or auxiliary agent and external application composition for human being or animal containing the same	424/443	424/447; 424/78.31; 424/78.35; 424/78.37	Sakai; Yasuyuki et al.
US 5289707 A	19940301	Steering wheel lock device	70/252	70/186	Suzuki; Noriyuki
US D344284 S	19940215	Toner bottle for copying machine	D18/43	222/DIG.1; D9/516	Suzuki; Noriyuki et al.
US 5254338	19931019	External application	424/78.35	424/443;	Sakai;

A		base or auxiliary agent and external application composition for human being or animal containing the same		424/447; 424/78.31; 424/78.37	Yasuyuki et al.
US 5240999 A	19930831	Polyarylate/polyester thermoplastic resin composition having high impact resistance and low melt viscosity	525/68	525/132; 525/133; 525/175; 525/64	Suzuki; Noriyuki et al.
US 5238492 A	19930824	Pigment and process for producing the same	106/436	106/441; 106/453	Itoh; Hiroshi et al.
US D338228 S	19930810	Sorter for copying machine	D18/48		Suzuki; Noriyuki et al.
US D334943 S	19930420	Copying machine	D18/39		Suzuki; Noriyuki et al.
US D333832 S	19930309	Cap for toner bottle	D18/40	D18/43; D9/435	Suzuki; Noriyuki et al.
US D332463 S	19930112	Paper feeder for copying machine	D18/49	D18/46	Suzuki; Noriyuki
US D329869 S	19920929	Automatic document feeder for copying machine	D18/49	D18/40	Suzuki; Noriyuki
US D329057 S	19920901	Document feeder for copying machine	D18/49	D18/46	Suzuki; Noriyuki
US 5130555 A	19920714	Tape crease inspecting method and apparatus having a stripe shaped pattern reflection plate	250/559.07	250/559.44; 250/570; 356/237.5; 356/430; 356/604; 706/900	Suzuki; Noriyuki et al.
US 5072282 A	19911210	Multi-layer wirings on a semiconductor device and fabrication method	257/764	257/774; 257/775; 257/E21.251; 257/E21.309; 257/E21.577; 257/E21.582; 257/E23.145; 257/E23.163; 257/E23.164; 257/E23.167; 428/209	Takagi; Hideo et al.

US 5070325 A	19911203	Coordinate input apparatus	345/179		Tanaka; Atsushi et al.
US 5050411 A	19910924	Shift lever locking device for automatic transmission of column type	70/248	70/201; 70/245	Kawachi; Tomonori et al.
US 5017651 A	19910521	Thermoplastic resin composition	525/66	525/133; 525/425	Tomita; Haruo et al.
US 4998177 A	19910305	Electromagnetic solenoid drive apparatus in a vehicle	361/154	307/10.1; 361/194; 361/205	Takizawa; Koji et al.
US 4964074 A	19901016	In-circuit emulator	703/28		Suzuki; Noriyuki et al.
US 4910466 A	19900320	Selecting means for selecting a plurality of information	327/99	326/112; 326/21; 327/208; 327/407; 327/414	Kiuchi; Atsushi et al.
US 4900873 A	19900213	Method of manufacturing phenols from lignin	568/761	568/762; 568/806	Kakemoto; Gohki et al.
US 4886943 A	19891212	Coordinates input apparatus	178/18.04	345/173; 367/907	Suzuki; Noriyuki et al.
US 4853494 A	19890801	Information processing apparatus for inputting coordinate data selectively from either the obverse or the reverse surface of an input tablet	178/18.04	341/23; 341/5; 345/179	Suzuki; Noriyuki
US 4769278 A	19880906	Resilient multi layered member incorporating skin layer, foam layer cushion layer and core, and method of manufacture thereof	442/326	156/228; 156/245; 428/159; 428/174; 428/316.6; 428/317.1; 428/319.7; 442/370	Kamimura; Tomohisa et al.
US 4728034 A	19880301	Cleaning device upon color-change in an electrostatic mutli-color coating apparatus	239/112		Matsumura; Teruaki et al.
US 4728033	19880301	Cleaning method	239/1	239/112	Matsumura;

A		upon color-change in an electrostatic multi-color coating apparatus			Teruaki et al.
US 4720664 A	19880119	Wiper control system	318/444	15/250.17; 318/443; 318/DIG.2	Iwamoto; Tadashi et al.
US D293574 S	19880105	Facsimile	D14/462		Kando; Masahiro et al.
US 4676189 A	19870630	Electrostatic spray coating apparatus	118/626	118/326; 118/DIG.7	Takeuchi; Hitoshi et al.
US 4647136 A	19870303	Modular plug and printed circuit connector	439/571	439/633; 439/64	Kinoshita; Yoshichika et al.
US 4182745 A	19800108	Catalyst for reducing nitrogen oxides in a waste gas and a process for catalytically reducing nitrogen oxides contained in a waste gas	423/239.1	502/208; 502/209; 502/213; 502/241; 502/242; 502/244; 502/247; 502/255; 502/256; 502/257; 502/510	Nishida; Fusao et al.
US 4119703 A	19781010	Process for removal of nitrogen oxides from waste gas	423/239.2	502/217; 502/218; 502/244	Nishida; Fusao et al.
US 3993731 A	19761123	Selective removal of nitrogen oxides from waste gas	423/239.1		Morikawa; Kiyoshi et al.